

## REMARKS/ARGUMENTS

In the Office Action mailed August 5, 2008, claims 1, 4-6, 9-21 were rejected. In response, Applicant hereby requests reconsideration of the application in view of the below-provided remarks. No claims are amended, added, or canceled.

### Claim Rejections under 35 U.S.C. 103

Claims 1, 4-6, and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chiussi et al. (U.S. Pat. Pub. No. 2003/0142624, hereinafter Chiussi) in view of Odman (U.S. Pat. Pub. No. 2003/0152059, hereinafter Odman). Additionally, claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chiussi in view of Odman and further in view of Hill (U.S. Pat. Pub. No. 2002/0035422, hereinafter Hill). Additionally, claims 11-13, 16-18, and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Karawai et al. (U.S. Pat. Pub. No. 2001/0033581, hereinafter Karawai) in view of Chiussi and Odman. Additionally, claims 14, 15, 19, and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Karawai, Chiussi, and Odman and further in view of Dell et al. (U.S. Pat. Pub. No. 2002/0085578, hereinafter Dell). However, Applicant respectfully submits that these claims are patentable over Chiussi, Odman, Hill, Karawai, and Dell for the reasons provided below.

### Independent Claim 1

Claim 1 recites “best effort control means coupled for controlling a best effort data scheduling, wherein the guaranteed throughput and best effort control means are arranged for a combined control such that the best effort data scheduling is based on a contention free guaranteed throughput scheduling” (emphasis added).

The Office Action acknowledges that Chiussi does not teach contention free guaranteed throughput scheduling. Office Action, 8/5/08, p. 5. Hence, the Office Action relies on Odman as purportedly teaching contention free guaranteed throughput scheduling. Office Action, 8/5/08, p. 6. However, Odman does not teach contention free guaranteed throughput scheduling because Odman does not address guaranteed throughput scheduling.

As recognized in the Office Action, Odman is directed to handling asynchronous data in a wireless network. Odman, abstract. In the wireless network, one device acts as a coordinator, and another device acts as a client to follow instructions from the coordinator device. Odman, paragraph 9; Fig. 3. Hence, Odman generally deals with wireless communications between separate and distinct wireless devices. Odman further teaches that the coordinator coordinates the sharing of bandwidth in the wireless network. Odman, paragraph 18. In order to coordinate the available bandwidth, the coordinator uses a series of superframes, which define how the bandwidth is split up among various tasks. Odman, paragraph 28. Each superframe includes a contention free period (CFP). Odman, paragraph 29; Fig. 5. The CFP includes a plurality of time slots, including management time slots (MTS) and guaranteed time slots (GTS). Odman, paragraph 32; Fig. 6. Odman teaches that the MTS is used to transmit administrative information between the coordinator device and the other devices. Odman, paragraph 33. Odman also teaches that the GTS is used to transmit isochronous non-administrative data between devices. Odman, paragraph 34. Odman does not appear to provide any other teachings regarding the MTS and GTS. Hence, the only teachings of Odman related to the CFP are the use of the MTS and the GTS.

While the GTS of Odman is referred to as a guaranteed time slot, there is no teaching in Odman to indicate that the GTS might provide guaranteed throughput. The mere use of the term “guaranteed” as part of the name of the GTS does not necessarily indicate that the GTS relates to throughput within the wireless network. Rather, the guaranteed aspect of the GTS could refer to a number of other wireless transmission characteristics other than guaranteed throughput. For example, the GTS could provide guaranteed access between a transmitter-receiver pair, without providing any type of minimum data throughput for the transmission. Alternatively, the GTS could provide a guaranteed time period (i.e., a time slot) for a particular communication, without providing any type of minimum data throughput for the communication. Thus, there are many aspects that may be intended by the reference to a guaranteed time slot in Odman, many of which are unrelated to guaranteed throughput. Consequently, in the absence of some specific teaching in Odman to indicate that the GTS specifically relates to guaranteed throughput, the actual teachings of Odman relative to the GTS are inadequate

to support the assertion in the Office Action. In other words, the actual teachings of Odman are insufficient to support the Office Action's conclusion that the GTS of Odman might teach guaranteed throughput. Therefore, Odman does not teach the limitation of contention free guaranteed throughput scheduling because the actual teachings of Odman are insufficient to show that the GTS necessarily relates to guaranteed throughput.

Additionally, even if Odman were to teach guaranteed throughput, the proposed combination of Chiussi and Odman is improper because the Office Action does not establish a reasonable expectation of success that the combination of Odman with Chiussi might achieve contention free guaranteed throughput scheduling within a data switching device, as recited in the claim. In particular, the Office Action fails to provide any explanation of how the use of the GTS within a wireless network to facilitate wireless communications between transmitter and receiver pairs might be implemented within the data switching device recited in the claim. Although the Office Action asserts that the proposed combination would have been obvious in order to ensure that all guaranteed bandwidth flows could be transmitted while meeting resource requirements, this assertion nevertheless does not provide any indication of how the GTS of Odman might actually be implemented within the data switching device recited in the claim. Moreover, it should be noted that the CFP and the GTS taught in Odman are merely periods, or time slots, within a superframe of a network protocol scheme. However, Chiussi does not appear to use such superframes, and the Office Action does not explain where or how a superframe using the CFP and/or the GTS periods, or time slots, might be implemented within the system of Chiussi. Therefore, the Office Action does not satisfy the burden to show a reasonable expectation of success for the proposed combination because the Office Action attempts to combine the wireless transmission superframe periods and time slots of Odman with the switching device of Chiussi, without attempting to explain how the proposed combination might be implemented or achieved.

For the reasons presented above, the combination of Chiussi and Odman does not teach all of the limitations of the claim because Odman does not teach contention free guaranteed throughput scheduling. Additionally, the proposed combination of Chiussi and Odman is improper because the Office Action does not establish a reasonable expectation of success for combining the superframe periods and time slots of Odman

with the switching device of Chiussi. Accordingly, Applicant respectfully asserts claim 1 is patentable over the combination of Chiussi and Odman because the proposed combination is improper and does not teach all of the limitations of the claim.

#### Independent Claim 5

Applicant respectfully asserts independent claim 5 is patentable over the combination of Chiussi and Odman at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 5 recites “scheduling best effort data for switching, wherein the best effort data scheduling is based on a contention free guaranteed throughput data scheduling” (emphasis added).

Here, although the language of claim 5 differs from the language of claim 1, and the scope of claim 5 should be interpreted independently of claim 1, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 5. Accordingly, Applicant respectfully asserts claim 5 is patentable over the combination of Chiussi and Odman because the proposed combination is improper and does not teach all of the limitations of the claim.

#### Independent Claim 11

Applicant respectfully asserts independent claim 11 is patentable over the combination of Karawai, Chiussi, and Odman at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 11 recites “best effort control means to schedule the best effort data for transfer through the switching matrix to another one of the plurality of outputs of the switching matrix, wherein best effort control means is further configured to schedule the best effort data based on a contention free guaranteed throughput scheduling” (emphasis added).

Here, although the language of claim 11 differs from the language of claim 1, and the scope of claim 11 should be interpreted independently of claim 1, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 11. Accordingly, Applicant respectfully asserts claim 11 is patentable over the combination of Karawai, Chiussi, and Odman because the proposed combination is improper and does not teach all of the limitations of the claim.

Furthermore, as a separate basis for patentability, Chiussi does not teach further limitations of claim 11. Claim 11 recites “guaranteed throughput control means to schedule the guaranteed throughput data for transfer through the switching matrix to one of the plurality of outputs of the switching matrix” (emphasis added) and “best effort control means to schedule the best effort data for transfer through the switching matrix to another one of the plurality of outputs of the switching matrix, wherein best effort control means is further configured to schedule the best effort data based on a contention free guaranteed throughput scheduling” (emphasis added).

In contrast, Chiussi does not teach transferring guaranteed throughput data to one output and best effort data to another output. Although the Office Action attempts to construe Chiussi as teachings the indicated arrangement, the actual teachings of Chiussi do not support the Office Action’s characterization. In fact, Chiussi does not appear to teach which links 204 or communication link interfaces 200 might be used for the GB and BE flows described in Chiussi. Moreover, the Office Action does not point out or cite any specific subject matter of Chiussi which might support the Office Action’s characterization. Therefore, in the absence of support by the actual teachings of Chiussi, it appears that the Office Action’s assertion is merely conclusory and that Chiussi does not actually teach the indicated limitations. Accordingly, Applicant respectfully submits that claim 11 is further patentable because Chiussi does not teach transferring guaranteed throughput data to one output and best effort data to another output, as recited in the claims.

#### Dependent Claims

Claims 4, 6, 9, 10, and 12-21 depend from and incorporate all of the limitations of the corresponding independent claims 1, 5, and 11. Applicant respectfully asserts claims 4, 6, 9, 10, and 12-21 are allowable based on allowable base claims. Additionally, each of claims 4, 6, 9, 10, and 12-21 may be allowable for further reasons.

## **CONCLUSION**

Applicant respectfully requests reconsideration of the claims in view of the remarks made herein. A notice of allowance is earnestly solicited.

Respectfully submitted,

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